

Amendments to the Specification

Please replace the paragraph on Page 5, lines 9 - 19 with the following marked-up replacement paragraph:

-- To achieve the foregoing objects, and in accordance with the purpose of the invention as broadly described herein, the present invention provides a computer program product, a system, and a method for sending TCP messages through HTTP systems. This technique comprises: establishing a send channel from a first component on a client side of a network ~~connection~~, through one or more HTTP-based systems, to a second component on a remote side of the network ~~connection~~; establishing a receive channel from the first component, through the one or more HTTP-based systems, to the second component, wherein the receive channel is distinct from the send channel; establishing a first TCP connection from a client on the client side to the first component; establishing a second TCP connection from the second component to a target server on the remote side; transmitting client-initiated TCP requests from the client to the target server by packaging the client-initiated TCP requests into HTTP messages which are transmitted on the send channel; and transmitting server-initiated TCP requests from the target server to the client by packaging the server-initiated TCP requests into HTTP messages which are transmitted on the receive channel. --

Please replace the paragraph on Page 6, lines 1 - 13 with the following marked-up replacement paragraph:

-- Transmitting the client-initiated TCP requests preferably further comprises: receiving a client-initiated TCP request from the client at the first component on the first TCP connection;

packaging the received client-initiated TCP request in an HTTP POST request message; sending the HTTP POST request message to the second component on the ~~network connection~~ send channel; receiving the sent HTTP POST request message at the second component; extracting the client-initiated TCP request from the received HTTP POST request message; and forwarding the extracted client-initiated TCP request to the target server on the second TCP connection.

Transmitting the client-initiated TCP requests may further comprise acknowledging the HTTP POST request by sending an HTTP POST response from the second component to the first component on the ~~network connection~~ send channel. The send channel is preferably established in response to receiving the client-initiated TCP request, and transmitting client-initiated TCP requests preferably further comprises receiving the HTTP POST response at the first component and then closing the send channel. --

Please replace the paragraph that begins on Page 6, line 14 and carries over to Page 7, line 10 with the following marked-up replacement paragraph:

-- Transmitting the server-initiated TCP requests preferably further comprises: sending an HTTP GET request message from the first component to the second component on the ~~network connection~~ receive channel; receiving the sent HTTP GET request message at the second component; receiving a server-initiated TCP request from the target server at the second component on the second TCP connection; packaging the received server-initiated TCP request in an HTTP GET response message which acknowledges the received HTTP GET request message; sending the HTTP GET response message from the second component to the first component on the ~~network connection~~ receive channel; receiving the sent HTTP GET response message at the

first component; extracting the server-initiated TCP request from the received HTTP GET response message; and forwarding the extracted server-initiated TCP request to the client on the first TCP connection. Transmitting the server-initiated TCP requests may further comprise performing a read operation on the second TCP connection, responsive to receiving the sent HTTP GET request message and prior to receiving the server-initiated TCP request, and using the received server-initiated TCP request as a result of the read operation, thereby triggering the packaging of the received server-initiated TCP request in the HTTP GET response message. Transmitting the server-initiated TCP requests preferably also further comprises preparing to receive another server-initiated TCP request by triggering the sending of the HTTP GET request message from the first component to the second component, responsive to receiving the sent HTTP GET response message at the first component. --